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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/698,215 Filing Date: October 31, 2003 Appellant(s): BAUMANN, JOHN A.

> Hugh Gortler For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January 17, 2012 appealing from the Office action mailed June 9, 2011.

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(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Rejected claims: 2, 3 and 62-68

Withdrawn claims: 4, 6, 11, 12 and 18

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

| GB 2169836 | SOLLMANN | 7-1986 |
|------------|----------|---------|
| 4,356,615 | DEARMAN | 11-1982 |
| 5,236,213 | TRICKETT | 8-1993 |

(9) Grounds of Rejection

Every ground of rejection set forth in the Final Rejection mail date 06092011 is being maintained by the examiner. Claims 62-66 and 2 stand rejected under 35 U.S.C. 102(b) as being anticipated by GB 2169836; claims 62, 63, 66 and 2 stand rejected under 35 U.S.C. 102(b) as being anticipated by Dearman 4356615; claims 3 and 67 stand rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2169836 in view of Trickett 5236213; claims 64 and 65, in the alternative stand rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2169836.

(10) Response to Argument

In regard to the anticipation rejection of claim 64 over Sollmann, Appellant argues that not a single feature of the claim is met by Sollmann. Appellant argues that Sollmann does not describe a crib configured to support an aircraft frame, and that Sollmann does not show a crib in any of the figures nor does the specification describe

one. Appellant seems to be reading more into the claims that recited, e.g., posts 16 with fixed support 20 (as defined in the instant application) forming sidewalls within which the work is supported. Specification as originally filed makes one reference to the "crib". On page 3, lines 11-12, specification describes for the frame to be held on a crib 16 that supports the workpiece. Crib 16 as shown in Fig. 1 is defined by posts supporting frame 14. Examiner based on the disclosure defines "a crib for supporting the underlying workpiece" as recited in the claim, as a means for supporting the work, lacking any other structural or narrative recitations to exclude said broad definition. Sollmann discloses for workpiece or repair piece 2 to be glued to the body plate 1. The body plate 1 meets the definition of a crib/support for supporting the underlying workpiece 2. Furthermore both body plate 1 and the repair piece 2 are supported, either on a table or by the ground as it appears. The argument appears to be whether this support (either body plate 1 or the ground) meets the recitation of a crib. For this Examiner looks to the specification to set the claim scope with respect to the term "crib". As noted above the only description for this term is a support to hold the frame, no structures or sidewalls are implied or recited to define the term otherwise.

Appellant further argues that Sollmann does not describe a chain of interspersed coupling units and force applying units. Appellant argues that characterization of Sollmann's elements, e.g., 10 and 12, links 11 and screws 7 as a chain of interspersed coupling units and force-applying units fail to meet the chains as recited. This argument is not persuasive, since Sollmann discloses the interspersed coupling units and force applying unit. Instant application defines a clamping system 25 that includes coupling

units 30 and force applying units 40. A chain of coupling units are clearly met by tubular bar 10, linkage 11 and connecting bars 12 as disclosed by Sollmann, e.g., Fig. 1. A chain of force applying unit can be met by legs 19 and 13. Sollmann discloses using legs for pressing down for any desired period **page 1, lines 99-102**, and for using legs that are adjustable to conform to the shape of the body **page 1, lines 103-106**. Sollmann further discloses on page 2, lines 70-86 to use legs 19 and 13 to press with the required strength and further discloses that only one leg 19 is shown however, in practice evenly distributed pressure legs will have to be used to be mounted along the entire glue joint. Thus at least multiple legs 19 that are used to press down the workpiece meet the recitation for a chain of force applying units. With regards to different reading of Sollmann as argued, it is also noted that bar 10, linkage 11 and bars 12 allow an extension of the tool for pressing down joints of some length **page 2, lines 55-61**, thus elements 5-9 may also define a chain of force applying units. It is noted again that claim 64, lacks any recitations to exclude such readings.

In regard to the anticipation rejection of claim 65 over Sollmann, Appellant argues that the '102 rejection of claim 65 should be withdrawn because it is based on additional factual deficiencies and it is also legally deficient. Appellant argues that since the final office action admits that Sollmann does not expressly describe aircraft skin or an aircraft frame and simply alleges that Sollmann's system is "capable of being applied to an aircraft skin/frame."; the '102 rejection of claim 65 should be withdrawn. This argument is not persuasive, since claim 65 is directed to a system for clamping intended for use on an aircraft skin, as recited in the preamble. The body of the claim recites for

the chains to be stretched across the skin. It appears that Appellant is arguing that for an anticipating rejection the intended use as recited in the preamble must be disclosed by reference applied, i.e., Sollmann. It is noted however, that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. It is further noted that while the recitation in the preamble is not ignored, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). In this case although Sollmann is silent about the intended use, it is clearly capable of gluing a repair skin 2 on a plate boy 1 of an aircraft, as it would be clearly recognized by persons of ordinary skill.

In regard to the anticipation rejection of claims 62, 63, and 2 over Sollmann,

Appellant argues that the '102 rejection should be withdrawn because it is based on
factual deficiencies. Appellant argues that Sollmann doesn't describe a single feature of
base claim 62. Appellant repeats the arguments that Sollmann does not describe a crib
configured to support an underlying work piece and that Sollmann does not describe a
chain of interspersed coupling units and force applying units, the chain extending across
the crib, the coupling units allowing the force-applying units to conform to an upper

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surface of a top work piece. Examiner respectfully disagrees with these arguments at least for the reasons indicated above.

In regard to the anticipation rejection of claim 66 over Sollmann, Appellant argues that the '102 rejection should be withdrawn because it is based on factual deficiencies. Appellant repeats the arguments that Sollmann does not describe a crib configured to support an underlying work piece and that Sollmann does not describe a chain of interspersed coupling units and force applying units, the chain extending across the crib, the coupling units allowing the force-applying units to conform to an upper surface of a top work piece. Examiner respectfully disagrees with these arguments at least for the reasons indicated above. Appellant further argues that Sollmann does not describe lockable coupling units that are (1) unlocked to make the chain flexible and allow the force-applying units to conform to the upper surface of the repair piece 2 and that are (2) locked to make the chain rigid and allow the force-applying units to press the repair panel 2 against the body plate 1. Appellant argues that Sollmann's rigid bar 15 is not lockable and unlockable. The bars 10 and 12 might be lockable and unlockable (via linkage 11), but those bars 10 and 12 are not interspersed with the force applying unit (screw 19). These arguments are not persuasive, since the coupling units 10-12 are interspersed with the force applying units, e.g., legs 19 and are lockable unlockable via linkage 11. It appears Appellant is arguing that the term "interspersed" is not met by Sollmann. This terminology is only used in the specification to define the arrangement of the non-elected species of Fig. 8. Appellant elected without traverse in a response dated 09/12/2005 to an election of species requirement mailed out on

07/28/2005. Claim 66 was maintained and examined by the Examiner, as broadly defining the arrangement for the elected species of Fig. 1, and as such no structures and/or structural relationships as disclosed in Fig. 8 were read into the claims. Interspersed is broadly defined as "placed at intervals or among". The coupling and force applying units as disclosed by Sollmann meets this interpretation, since the coupling units 10-12 are placed at intervals or among the force applying units, legs 19. Even the rigid bar 15 is locked and unlocked by screw 17.

In regard to the obviousness rejection of claims 64 and 65 over Sollmann

Appellant argues that the '103 rejection should be withdrawn because it is based on factual and legal deficiencies. Appellant points out to the arguments previously presented that Sollmann does not describe a single feature of claims 64 or 65.

Appellant further argues that the '103 rejection is factually deficient, that the final office action provides no rational underpinnings or articulated reasoning for using a crib in combination with Sollmann's retaining tool. The latter argument is not relevant since Sollmann is not modified for a crib. Sollmann is applied under the anticipation rejections to claims 64 and 65, since the system as disclosed by Sollmann is readily capable of being applied to an aircraft skin and since it also capable of being applied to complex surface shapes. Sollmann discloses that any number of legs may be used and at any desired place since the legs may be adjusted to the outer shape of the body. Sollmann was further applied under obviousness rejections to claims 64 and 65, since it does not specifically discloses the use on an aircraft skin, as such application would amount to applying a known technique to a known device (e.g., prior art device) ready for

improvement to yield predictable results. Gluing a repair skin to an underlying body of aircraft skin utilizing the coupling and force applying units as disclosed by Sollmann is obvious to one of ordinary skill in the art. Thus the arguments that there are no rational for providing a crib and for creating a chain of 19 and flexible bars are unpersuasive, since Sollmann already provides for a crib/support, a chain of legs **page 2**, **lines 87-90** and no need for a flexible bar 15, since claims do not recite such feature. Claims only recite for the chains to be interspersed **met by Sollmann**, stretched across the surface of the skin **met by Sollmann** and allowing the units to conform to the skin **met by 10**, **11**, **12**, **19's**, **6-9**, **14** and **20**. Application of such system to an aircraft skin is obvious to one of ordinary skill in the art and well within the requirements of KSR reasoning.

In regard to the anticipation rejection of claims 2, 62, 63, and 66 over Dearman,
Appellant argues that the '102 rejection should be withdrawn because it is based on
factual deficiencies. Appellant argues that Dearman doesn't disclose for the clamp unit
13 to extend across the cradle 1. This argument is not persuasive, since the claims
recite for the units to extend across the crib/support. Dearman discloses for the units 13
to extend across the crib/support 10, as clearly shown in Fig. 1

Appellant further argues that the screws 35 of the pressure devices 34 do not press a top work piece onto an underlying work piece and that they simply bear down on the end 5 of a pipe 4. This argument is not persuasive, since even bearing down on the workpiece meets the recitation as broadly defined.

In regard to the anticipation rejection of claim 66 over Dearman Appellant presents the same arguments that Dearman does not describe a chain of force-coupling

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and force applying units; that the clamp unit 13 does not extend across the cradle 1; the screws 35 of the pressure devices 34 do not press a top work piece onto an underlying work piece rather bear down on the end 5 of a pipe 4. Examiner respectfully disagrees for the same reasons indicated above. Appellant further argues that Dearman doesn't describe multiple lockable coupling units that are unlocked to make the clamping unit 13 flexible and locked to make the unit 13 rigid. This argument is not persuasive, since the ends freely pivoted arcuate segments 16-19 may be coupled together by a tongue 27, as indicated by Appellant, and as such meets the recitation of being locked and unlocked. The argument that Dearman's arcuate segments 16-19 (coupling units) are not adjustable to "conform" to the surface of a work piece, since the arcuate segments 16-19 are configured to fit around a pipe 4 and nothing other than the pipe 4, is not persuasive because being configured to fit around a pipe still meet the recitation of conforming to the surface of the workpiece. Dearman discloses all of the limitations of claims 62, 64, i.e., a system for clamping a top work piece 4 to an underlying work piece **94** (top and bottom depends on the orientation of the workpieces), the system comprising a crib 10 (figure 1) or dolly/crane 06:10 for supporting the underlying work piece; and a chain of interspersed coupling units 16-19 and force applying units 34, the chain stretching across the crib e.g., Fig. 3, the coupling units allowing the forceapplying units to conform to the upper surface of the top work piece, the force-applying units for pressing the top work piece against the underlying work piece. The system defining a chain of lockable coupling units, i.e., lockable via 25, 27 to allow the chain to flex and allow force applying unit to conform to the workpiece.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Hadi Shakeri/ Primary Examiner, Art Unit 3727

Conferees:

/Monica S. Carter/ Supervisory Examiner, Art Unit 3727

<u>/Sue Lao/</u> Primary Examiner